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The Pegasus launch vehicle is transported to Building M-20 to begin preparation for the U.S. Air Force STEP-4 mission. The OSC L-1011, in background, delivered the Pegasus to Wallops on September 19. The STEP-4 mission is scheduled for no earlier than October 17. Photo by Tom Burton.

NASA Issues X-33 Environmental Study

NASA released September 26 the Final Environmental Impact Statement on the development and flight testing of the X-33 Advanced Technology Demonstrator.

The study considers issues such as public safety, noise, impacts on general aviation and effects on biological and natural resources.

In the document NASA named three preferred landing sites and one preferred launch site for the X-33. Seven sites were evaluated for potential use during the 14-month study.

The preferred launch site is located near Haystack Butte on the eastern portion of Edwards Air Force Base, CA. The preferred landing sites identified are Silurian Lake, a dry lake bed near Baker, CA; Michael Army Air Field, Dugway Proving Ground, UT; and Malstrom Air Force Base near Great Falls, MT.

After 30 days NASA will issue a Record of Decision announcing if it intends to proceed with the X-33 flight test program as described in the environmental impact statement. That final decision will be based on technical, cost and schedule considerations in addition to environmental factors.

The 273,000-pound, wedge-shaped X-33 is being developed under a cooperative agreement between NASA and Lockheed Martin Skunk Works, Palmdale, CA which began July 1996.

New TRMM Launch Date Set

NASA and the National Space Development Agency of Japan (NASDA) have set Nov. 18, 1997, as the new launch date for the Tropical Rainfall Measuring Mission (TRMM).

The launch was originally scheduled for October 31 from the Tanegashima Space Center in Japan.

The launch delay was caused by a problem with TRMM's companion payload on the H-II Rocket, the Japanese Engineering Test Satellite. The launch was postponed to allow time for repairs.

Wallops News Shorts

...Participants in the annual beach cleanup on September 20 collected nearly two tons of trash and debris on the north end of Wallops Island. Thirty personnel, family and friends of NASA and the Navy participated in the event. Veteran beachcombers noted that the trash was much less than that collected in previous years. Thanks to everyone who supported this event.

... A cosmic and heliospheric physics payload from Washington University was successfully flown on a NASA scientific balloon September 24 from Ft. Sumner, NM. The payload, which was recovered, was flown on a 39.57 million cubic foot balloon. The principal investigator was Dr. Robert Binns.

New Global Ocean- Color Images Show Promise

Exciting ocean-color images from the Sea-Viewing Wide Field-of-view Sensor (SeaWiFS) - the first readily available ocean-color data in more than ten years - should play a major role in studying the ongoing El Nino and in other global warming research.

The SeaWiFS data also is giving scientists their first continuous look at the global biosphere — the combination of living organisms and their environment. Ocean color is largely determined by the concentration of microscopic marine plants called phytoplankton.

Accurately measuring phytoplankton concentration is important to climate change research and to local economic concerns such as commercial fishing.

SeaWiFS offers great potential for monitoring oceanic conditions that have serious, and often tragic, effects on human health.

Coastal blooms of algae have been associated with cholera outbreaks around the world. Early detection of these blooms, and subsequent in-water sampling, may significantly reduce the impact of these outbreaks.

Red tides, ocean dumping of organic and chemical waste, and perhaps even oil spills can be tracked with SeaWiFS data, according to Gene Feldman, head of SeaWiFS data processing team at Greenbelt.

The SeaWiFS instrument is aboard a commercially built and operated satellite called OrbView 2, owned by Orbital Sciences Corp.

The SeaWiFS mission is unlike many other NASA missions. NASA's SeaWiFS Project described the data they wanted to purchase without giving specific requirements for the spacecraft itself.

Images from SeaWiFS are available from the World Wide Web at URL:

<http://seawifs.gsfc.nasa.gov/SEAWIFS.html>

Health Hints

Dianne Hargrove, R.N.

Hot tub and spa safety

The main hazard from hot tubs and spas is the same as that from backyard pools — drowning.

There have been more than 700 deaths related to spas and hot tubs since 1980. Approx-imately one-third of the deaths were drownings of children under age five.

Several deaths have occurred because of extremely hot spa water (approximately 110 degrees F). Current standards call for water temperatures to never exceed 104 degrees F. High temperatures can cause drowsiness, which may lead to unconsciousness, resulting in drowning. Raised body temperatures can lead to heat stroke and death.

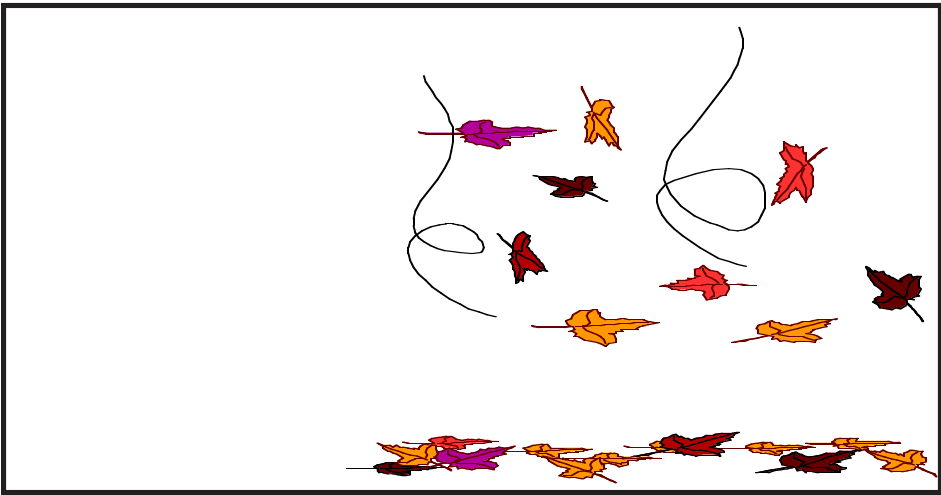
Pregnant women and young children should not use a spa before consulting a physician.

Another dangerous situation involves missing or broken drain covers. Incidents have been reported in which people’s hair was sucked into the suction fitting of a spa, hot tub or whirlpool, causing the victim’s head to be held under water. Other deaths have occurred when all or part of victim’s bodies were trapped by strong drain suction.

New standards require dome-shaped drain outlets and two outlets for each pump. This reduces the powerful suction if one drain is blocked.

The following are suggestions for precautions with hot-tubs and spas:

- Lock the safety cover when the spa is not in use.
- Make sure the spa has dual drains and drain covers required by current standards.
- Keep the temperature of the water in the spa at 105 degrees F or below.
- Schedule regular professional safety inspections to make sure drain covers are in place and are not cracked or missing.
- Personally check drain covers periodically.
- Know the location of the cutoff switch for your pump so it can be turned off in an emergency.
- Do not consume alcohol while using a spa.
- Spend no more than 10 minutes in the hot tub.



Center Director’s Colloquia Series
"A Conductor’s Insight Into Creativity and Leadership"

Benjamin Zander, Conductor, Boston Philharmonic Orchestra will be the guest speaker for the second of the Center Director’s Colloquia Series. “A Conductor’s Insight into Creativity and Leadership” will be televised on Wallops TV, Channel 6, Wednesday, October 8, 10 a.m. to noon.

Paraphrasing Zander, some of the greatest achievements and accomplishments have been by people whose imagination, whose risk taking, and whose fantasy have led them in directions in which no one else was looking. Music can uplift and trans-

form us and serve as an inspiration — a catalyst for creativity and risk taking. Through a combination of lecture, audience participation and live music, Zander will encourage people to take risks and challenge “business as usual” attitudes. He will use the role of a conductor and the conductor’s interaction with the orchestra as metaphors for leadership and teamwork. In an orchestra every voice has to be heard and the harmony is a combination of these voices. In the final analysis, there may be no difference between conducting a symphony and leadership — both can be creative expressions of the soul.

Aerobics Club News

The Wallops Aerobics Club will soon be starting a new eight-week session which lasts through November 24. No prior experience is necessary. Fourteen people are needed to keep class fees low. Everyone is welcome.

Class times:		
Monday	11:30 a.m. - Noon	Aerobics
	5:00 p.m. - 6:00 p.m.	Aerobics & Toning
Tuesday	11:30 a.m. - Noon	Toning
Wednesday	11:30 a.m. - Noon	Aerobics
	5:00 p.m. - 6:00 p.m.	Aerobics & Toning
Thursday	11:30 a.m. - Noon	Toning
Friday	11:30 a.m. - Noon	Aerobics
	4:45 p.m. - 5:45 p.m.	Aerobics & Toning

Location:
Lunchtime classes are currently held on the stage in the gym.
Evening classes are held on the basketball court in the gym.

Cost:
\$20 for current members for the entire eight weeks (as many classes as you want to attend), or \$26 for new members for the entire eight weeks (as many classes as you want to attend), or \$2 per hour of instruction

For more information, call Donna Smith x1346.

More than a Gift

“More than a gift” is this year’s theme for the annual Combined Federal Campaign. Robert Nock, Wallops Chairperson, has announced that the campaign will run from October 1 to October 31.

Information pamphlets and pledge forms will be distributed during the coming week. Questions can be directed to Robert, x2559.

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